

**Claims**

1. A communications system comprising a first node having a first address, the first node being capable of communicating with a second node  
5 via a communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the first node with respect to the communications network, wherein the communications protocol is arranged to use the dynamic address variation facility to support a use of a second address to identify the  
10 first node instead of the first address in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node.
2. A system as claimed in Claim 1, wherein the non-mobility related  
15 requirement to use the second address to identify the first node for communicating a packet between the first node and the second node is a requirement to use the second address as a result of all routes between the first and second nodes corresponding to the first address becoming deprecated in relation to the first node.  
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3. A system as claimed in Claim 1, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to use the second address as a result of all routes between the first and second nodes corresponding to the  
25 first address failing or becoming unavailable in relation to the first node.
4. A system as claimed in Claim 1, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to route the packet  
30 originating from the second node to a third node.
5. A communications system comprising a first node having a first address associated with routing packets from a second node to the first node

via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access  
5 networks and the intermediary network being arranged to operate in accordance with a communications protocol having a dynamic address variation facility for managing mobility of the first node, wherein the communications protocol is arranged to use the dynamic address variation facility to support a use of the second address instead of the first address to  
10 identify the first node for communicating a packet between the first node and the second node in response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

15 6. A node apparatus for a communications network, the apparatus comprising a first address and being capable of communicating with a second node via the communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the node apparatus with respect to the  
20 communications network, wherein the communications protocol is arranged to use the dynamic address variation facility to support a use of a second address to identify the first node instead of the first address in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second  
25 node.

7. An apparatus as claimed in Claim 6, wherein the non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node is a  
30 requirement to use the second address as a result of all routes between the first and second nodes corresponding to the first address becoming deprecated in relation to the first node.

8. An apparatus as claimed in Claim 6, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to use the second address as a result of all routes between the first and second nodes corresponding to the first address failing or becoming unavailable in relation to the first node.

9. An apparatus as claimed in Claim 6, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to route the packet originating from the second node to a third node.

10. A node apparatus for a communications network, the apparatus comprising a first address associated with routing packets from a second node to the first node via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in accordance with a communications protocol having a dynamic address variation facility for managing mobility of the node apparatus, wherein the communications protocol arranged to use the dynamic address variation facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

11. A method of routing packets destined for a first node having a first address, the first node being capable of communicating with a second node via a communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the first node with respect to the communications network, the method comprising the step of:

using the dynamic address variation facility to support a use of a second address to identify the first node instead of the first address in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node.

12. A method as claimed in Claim 11, wherein the non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node is a requirement to use the second address as a result of all routes between the first and second nodes corresponding to the first address becoming deprecated in relation to the first node.

13. A method as claimed in Claim 11, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to use the second address as a result of all routes between the first and second nodes corresponding to the first address failing or becoming unavailable in relation to the first node.

14. A method as claimed in Claim 11, wherein the non-mobility related requirement to use the second address to communicate a packet between the first node and the second node is a requirement to route the packet originating from the second node to a third node.

15. A method of routing packets destined for a first node having a first address associated with routing the packets from a second node to the first node via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in accordance with a communications protocol having a dynamic address

variation facility for managing mobility of the first node, the method comprising the step of:

5 using the dynamic address variation facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

10 16. Computer executable software code stored on a computer readable medium, the code being routing packets destined for a first node having a first address, the first node being capable of communicating with a second node via a communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the first node with respect to the communications network, the code comprising:

15 code to use the dynamic address variation facility to support a use of a second address to identify the first node instead of the first address in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node.

20 17. A programmed computer for routing packets destined for a first node having a first address, the first node being capable of communicating with a second node via a communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the first node with respect to the communications network, the computer comprising memory having at least one region for storing computer executable program code, and

25 a processor for executing the program code stored in memory, wherein the program code includes:

30 code to use the dynamic address variation facility to support a use of a second address to identify the first node instead of the first address in response to a non-mobility related requirement to use the second address to

identify the first node for communicating a packet between the first node and the second node.

18. A computer readable medium having computer executable software  
5 code stored thereon, the code being for routing packets destined for a first node having a first address, the first node being capable of communicating with a second node via a communications network in accordance with a communications protocol, the communications protocol having a dynamic address variation facility for managing mobility of the first node with respect to  
10 the communications network, and the code comprising:

code to use the dynamic address variation facility to support a use of a second address to identify the first node instead of the first address in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and  
15 the second node.

19. Computer executable software code stored on a computer readable medium, the code being for routing packets destined for a first node having a first address associated with routing the packets from a second node to the  
20 first node via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in  
25 accordance with a communications protocol having a dynamic address variation facility for managing mobility of the first node, the code comprising:

code to use the dynamic address variation facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in  
30 response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

20. A programmed computer for routing packets destined for a first node having a first address associated with routing the packets from a second node to the first node via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in accordance with a communications protocol having a dynamic address variation facility for managing mobility of the first node, comprising memory having at least one region for storing computer executable program code, and a processor for executing the program code stored in memory, wherein the program code includes:

code to use the dynamic address variation facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

21. A computer readable medium having computer executable software code stored thereon, the code being for routing packets destined for a first node having a first address associated with routing the packets from a second node to the first node via a first access network of a first type and a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in accordance with a communications protocol having a dynamic address variation facility for managing mobility of the first node, and the code comprising:

code to use the dynamic address variation facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in

response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.

22. A use of a dynamic address variation facility for managing mobility of a first node arranged to communicate with a second node via a communications network, the use comprising: using the dynamic address variation facility to support a use of a second address to identify the first node instead of a first address associated with the first node in response to a non-mobility related requirement to use the second address to identify the first node for communicating a packet between the first node and the second node.

23. A use of a dynamic address variation facility for managing mobility of a first node arranged to communicate with a second node via a communications network, the first node having a first address associated with routing packets from the second node to the first node via a first access network of a first type, and the second node having a second address associated with routing packets from the second node to the first node via a second access network of a second type; the first and second types are different and interconnected by an intermediary network, the first and second access networks and the intermediary network being arranged to operate in accordance with a communications protocol having the dynamic address variation facility, the use comprising: using the address update facility to support a use of the second address instead of the first address to identify the first node for communicating a packet between the first node and the second node in response to a requirement of the first node to communicate with the second node via the second access network instead of the first access network.